



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/728,454

12/05/2003

Michael See

134122

9325

77216 7590 03/31/2009
ALCATEL-LUCENT
C/O GALASSO & ASSOCIATES, LP
P. O. BOX 26503
AUSTIN, TX 78755-0503

EXAMINER

HASHEM, LISA

ART UNIT

PAPER NUMBER

2614

MAIL DATE

DELIVERY MODE

03/31/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/728,454	Applicant(s) SEE ET AL.	
	Examiner LISA HASHEM	Art Unit 2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 January 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10, 12-19 and 27-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10, 12-19, 27-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of claims 1-10, 12-19, and 27-30 in the reply filed on 1-6-2009 is acknowledged.
2. Claims 20-23, 26, 31, and 37 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 1-6-2009.

Terminal Disclaimer

3. Terminal Disclaimer filed on 8-13-08 is entered.

Response to Arguments

4. Applicant's arguments filed 8-13-08 have been fully considered but they are not persuasive. Applicant argues that the prior art of Pearce does not disclose '...the system attribute comprises connectivity information associated with physical locality of the one or more devices...'. Examiner disagrees. Pearce discloses the virtual telephony device (Fig. 2, 28) or node automatically responds with a device identification acknowledgment message (i.e. instruction) from the node to the one or more Voice-over-IP devices (i.e. IP telephony device; Fig. 2, 22), the device identification acknowledgement message comprising one or more system attributes (i.e. logical port identifiers); and each of the one or more devices having a physical locality (i.e. IP telephony device (Fig. 1, 22) is located in a particular LAN (Fig. 1, 20a) that has a virtual telephony device (Fig. 1, 28)) (col. 3, line 66 – col. 4, line 10; col. 6, line 66 – col. 7, line 22), wherein the system attribute including connectivity information (i.e. logical port identifiers of the virtual telephony device; TCP and/or UDP ports) associated with the physical

Art Unit: 2614

locality (i.e. IP telephony (Fig. 1, 22) device located in LAN (Fig. 1, 20a)) of the one or more devices (i.e. IP telephony device) (col. 7, lines 34-67). Thus, Pearce discloses the claimed limitations.

5. Applicant further argues that Pearce does not disclose ‘...Pearce discusses the logical address of the IP device, not the actual physical geographical location of the IP device...’.

Examiner disagrees. The IP telephony device is located in LAN (Fig. 1, 20a) that has a virtual telephony device that is used as an intermediary to set up a call between two IP telephony devices located in the LAN (col. 3, line 66 – col. 4, line 10; col. 6, line 66 – col. 7, line 22).

Logical port identifiers of the virtual telephony device are used to provide a logical connection between the virtual telephony device and the sending and receiving IP telephony devices (Figures 1 and 2: 22, 23) (col. 6, line 66 – col. 7, line 22).

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claim 1 recites the limitation "the physical locality" in line 11. There is insufficient antecedent basis for this limitation in the claim. (Examiner recommends changing the recitation of ‘...physically locality...’ in line 10 to ‘...physical locality...’).

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 1, 2, 4, 12, and 15-17 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Pat. No. 6,804,254 by Pearce et al, hereinafter Pearce.

Regarding claim 1, Pearce discloses a system attribute exchange method for automatically providing at least one system attribute to one or more Voice-over-Internet Protocol (IP) devices (Fig. 1: 22-24; VoIP telephony devices; Fig. 2: 22, 23) (col. 3, line 66 – col. 4, line 10) in a network (Fig. 1, 20a (LAN); col. 1, lines 31-43; col. 2, line 61 – col. 3, line 19), the method comprising the steps of:

(a) automatically sending a Voice-over-IP device identification message (i.e. registration request including type of telephony device and device's IP and MAC addresses) (col. 7, lines 18-33) from the one or more Voice-over-IP devices (Fig. 1, 22; Fig. 2, 22) to a node (Fig. 1, 28: virtual telephony device; Fig. 2, 28) when the one or more Voice-over-IP device is operably coupled to the node (col. 4, lines 10-27; col. 6, line 56 – col. 7, line 33);

(b) automatically responding with a device identification acknowledgment message (i.e. instruction) from the node to the one or more Voice-over-IP devices, the device identification acknowledgement message comprising one or more system attributes (i.e. logical port identifiers;

TCP and/or UDP ports) (col. 7, lines 34-67); and (c) and each of the one or more devices having a physical locality (i.e. IP telephony device (Fig. 1, 22) is located in a particular LAN (Fig. 1, 20a) that has a virtual telephony device (Fig. 1, 28)) (col. 3, line 66 – col. 4, line 10; col. 6, line 66 – col. 7, line 22), wherein the system attribute including connectivity information (i.e. logical port identifiers of the virtual telephony device) associated with the physical locality (i.e. IP telephony (Fig. 1, 22) device located in LAN (Fig. 1, 20a)) of the one or more devices (i.e. IP telephony device) (col. 7, lines 34-67).

Regarding claim 2, the system attribute exchange method of claim 1, wherein Pearce discloses the device identification acknowledgment is a Voice-over-IP device identification acknowledgment message (col. 7, lines 34-49).

Regarding claim 4, the system attribute exchange method of claim 2, wherein Pearce discloses the node is a switching device (col. 6, line 56 – col. 7, line 17), and the one or more system attributes comprise a switching device identification as well as a port identification (i.e. port 2000 and/or port 2100) of a port (i.e. TCP and/or UDP port) to which the Voice-over-IP device is connected (col. 7, lines 34-54).

Regarding claim 12, the system attribute exchange method of claim 1, wherein Pearce discloses the system attribute comprises connectivity information pertaining to physical connection of the one or more Voice-over-IP devices at the node (col. 4, lines 11-19; col. 7, lines 18-54).

Regarding claim 15, the system attribute exchange method of claim 1, wherein Pearce discloses the node is a switching device (col. 6, line 56 – col. 7, line 33).

Regarding claim 16, the system attribute exchange method of claim 15, wherein Pearce discloses the switching device (Fig. 1, 28) is adjacent to at least one of the one or more devices (Fig. 1: 22-24) (col. 7, lines 18-22).

Regarding claim 17, the system attribute exchange method of claim 15, wherein Fangman discloses at least one of the one or more devices is a Voice-over-IP device (col. 3, line 66 – col. 4, line 10).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 3, 5-10, 27, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pearce, as applied to claim 2, and in further view of U.S. Pat. No. 6,781,989 by Acharya.

Regarding claim 3, the system attribute exchange method of claim 2, wherein Pearce does not disclose the one or more system attributes comprises a Virtual Local Area network (VLAN) identification assigned to Voice-over-IP communications.

Acharya discloses a system attribute exchange method for automatically providing at least one system attribute to one or more Voice-over-IP devices (Fig. 1: 12, 14, 18, 20; devices) (col. 4, lines 5-21) in a network (i.e. IP based VLAN; col. 3, lines 27-31), the method comprising the steps of:

(a) automatically sending a Voice-over-IP device identification message (i.e. frames) (col. 10, lines 4-21) from the one or more Voice-over-IP devices (Fig. 1: 12, 14, 18, 20; device) to a node

Art Unit: 2614

(Fig. 3, 510: network interface device; col. 5, lines 40-46) when the one or more Voice-over-IP device is operably coupled to the node (col. 4, lines 5-21; col. 11, lines 55-61); and
(b) automatically responding with a device identification acknowledgment message (i.e. VLAN assignment) from the node, the device identification acknowledgement message comprising one or more system attributes (col. 2, lines 32-36; col. 3, lines 27-31; col. 11, lines 55-61; col. 12, lines 61-67).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Pearce to include one or more system attributes comprises a VLAN identification assigned to Voice-over-IP communications as taught by Acharya. In other words, one of ordinary skill in the art would have been lead to make such a modification of Pearce to include a VLAN identification, such as the VLAN identification of Acharya, to the acknowledgement message of Pearce so the first node of Pearce would know the VLAN identification the first node belongs to and include that identification with data frames. The benefit of providing the VLAN identification of Pearce was obvious and taught by Acharya: automatically communicate VLAN information to the first node with minimal delay.

Regarding claim 5, the system attribute exchange method of claim 3, wherein Pearce discloses the one or more Voice-over-IP devices comprise one or more Internet Protocol (IP) phones (col. 1, lines 31-43; col. 3, line 66 – col. 4, line 10).

Regarding claim 6, the system attribute exchange method of claim 3, wherein Pearce discloses the Voice-over-IP device is operably coupled to the node at the time of initialization of the Voice-over-IP device (col. 7, lines 24-33).

Regarding claim 7, the system attribute exchange method of claim 3, wherein Acharya discloses the Voice-over-IP device identification message and the Voice-over-IP device identification acknowledgment are Attribute Advertisement Protocol messages (col. 10, lines 4-21).

Regarding claim 8, the system attribute exchange method of claim 7, wherein Acharya discloses a destination address of the Voice-over-IP device identification message includes a unique medium access control (MAC) address indicative of a system attribute exchange between the Voice-over-IP device and node (col. 4, lines 55-63).

Regarding claim 9, the system attribute exchange method of claim 3, wherein Pearce discloses the Voice-over-IP device identification message is sent in response to a node initialization message (col. 7, lines 24-33).

Regarding claim 10, the system attribute exchange method of claim 9, wherein Pearce discloses the node initialization message (i.e. acceptance of telephony device registration) is a switching device initialization message transmitted by a switching device upon the initialization thereof (col. 7, lines 24-33).

Regarding claim 27, the system attribute exchange method of claim 8, wherein Acharya discloses the media access controller (MAC) address is a broadcast MAC address (col. 4, lines 55-63).

Regarding claim 28, the system attribute exchange method of claim 8, wherein Acharya discloses the MAC address is a multicast MAC address (col. 4, lines 55-63).

12. Claims 13, 14, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pearce, as applied to claim 12, and in further view of Leung.

Regarding claim 13, the system attribute exchange method of claim 12, wherein Pearce does not disclose one or more system attributes are transmitted to a relation database that associates at least one port number to its geographic location, whereby the physical location of the one or more devices is determined from the IP address of the Voice-over-IP device.

Leung discloses one or more system attributes are transmitted to a relation database (Fig. 8, 110; Fig. 10) that associates at least one port number to its geographic location (col. 3, lines 3-19), whereby the physical location of one or more devices (Fig. 8, 109) is determined from the IP address of a Voice-over-IP device (col. 8, lines 11-38; col. 9, line 57 – col. 10, line 14).

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the method of Pearce to include a relation database as taught by Leung. One of ordinary skill in the art would have been lead to make such a modification to provide services for a VoIP device located in a VLAN.

Regarding claim 14, the system attribute exchange method of claim 13, wherein Leung discloses a storage device is included in an Internet Protocol (IP) private branch exchange (PBX) system (Fig. 8, 110; Fig. 10) that cooperates with the Voice-over-IP device to provide voice communications (col. 8, lines 11-38; col. 9, line 57 – col. 10, line 14).

Regarding claim 30, the system attribute exchange method of claim 12, wherein Pearce does not disclose one or more system attribute are transmitted to a relation database that associates at least one port number to its geographic location, whereby the physical location of the one or more devices is determined from the MAC address of the Voice-over-IP device.

Leung discloses one or more system attributes are transmitted to a relation database (Fig. 8, 110; Fig. 10) that associates at least one port number to its geographic location (col. 3, lines 3-

19), whereby the physical location of one or more devices (Fig. 8, 109) is determined from the MAC address of a Voice-over-IP device (col. 8, lines 11-38; col. 9, line 57 – col. 10, line 14).

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the method of Pearce to include a relation database as taught by Leung. One of ordinary skill in the art would have been lead to make such a modification to provide services for a VoIP device located in a VLAN.

13. Claims 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pearce, as applied to claim 17, and in further view of Acharya.

Regarding claim 18, the system attribute exchange method of claim 17, wherein Pearce does not disclose at least one of the one or more system attributes is a VLAN identification substantially dedicated to Voice-over IP communication within the network.

Acharya discloses a system attribute exchange method for automatically providing at least one system attribute to one or more Voice-over-IP devices (Fig. 1: 12, 14, 18, 20; devices) (col. 4, lines 5-21) in a network (i.e. IP based VLAN; col. 3, lines 27-31), the method comprising the steps of:

- (a) automatically sending a Voice-over-IP device identification message (i.e. frames) (col. 10, lines 4-21) from the one or more Voice-over-IP devices (Fig. 1: 12, 14, 18, 20; device) to a node (Fig. 3, 510: network interface device; col. 5, lines 40-46) when the one or more Voice-over-IP device is operably coupled to the node (col. 4, lines 5-21; col. 11, lines 55-61); and
- (b) automatically responding with a device identification acknowledgment message (i.e. VLAN assignment) from the node, the device identification acknowledgement message comprising one

or more system attributes (col. 2, lines 32-36; col. 3, lines 27-31; col. 11, lines 55-61; col. 12, lines 61-67).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Pearce to include one or more system attributes comprises a VLAN identification assigned to Voice-over-IP communications as taught by Acharya. In other words, one of ordinary skill in the art would have been lead to make such a modification of Pearce to include a VLAN identification, such as the VLAN identification of Acharya, to the acknowledgement message of Pearce so the first node of Pearce would know the VLAN identification the first node belongs to and include that identification with data frames. The benefit of providing the VLAN identification of Pearce was obvious and taught by Acharya: automatically communicate VLAN information to the first node with minimal delay.

Regarding claim 19, the system attribute exchange method of claim 18, wherein the Pearce in view of Acharya discloses a switching device is made aware of the VLAN identification via a VLAN registration protocol (Pearce: col. 7, lines 24-67; Acharya: col. 12, lines 30-33 and lines 43-50).

14. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pearce in view of Acharya, as applied to claim 19, and in further view of Meier.

Regarding claim 29, the system attribute exchange method of claim 19, wherein Pearce in view of Acharya do not disclose the VLAN registration protocol is the Group Address Resolution Protocol (GARP) VLAN registration protocol.

Meier discloses a system attribute exchange method for automatically providing at least one system attribute to one or more devices in a network, the method comprising the steps of:

Art Unit: 2614

- (a) automatically sending a device identification message from the one or more devices (Fig. 2: A4, A5, B4, B5) to a node (Fig. 2, VLAN Switch) when the device is operably coupled to the node (col. 6, lines 14-20); and
- (b) automatically responding with a device identification acknowledgment message from the node to the one or more devices, the device identification acknowledgement message comprising one or more system attributes (col. 6, lines 42-64).

Wherein Meier discloses the VLAN registration protocol is the GARP VLAN registration protocol (col. 4, lines 34-43; col. 5, lines 26-63; col. 7, lines 33-59).

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the method of Pearce in view of Acharya to include a GARP VLAN registration protocol as taught by Meier. One of ordinary skill in the art would have been lead to make such a modification to provide a protocol that sends a 'join' message to devices to join an attribute group and support registration of a device.

Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892 Form.

16. Any response to this action should be mailed to:

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Or faxed to:

(571) 273-8300 (for formal communications intended for entry)

Or call:

(571) 272-2600 (for customer service assistance)

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to LISA HASHEM whose telephone number is (571)272-7542. The examiner can normally be reached on M-F 8:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fan Tsang can be reached on (571) 272-7547. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-2600.

18. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Lisa Hashem/
Examiner, Art Unit 2614
March 31, 2009